## The Nautilus.

## a Gigantic solemya and a new vesicomya.

## BY WILLIAM HEALEY DALL.

In the course of the Albatross dredgings in the Philippines during the period in which Dr. Paul Bartsch of the U.S. National Museum was attached to the scientific staff of that vessel, a dredging was made between the islands of Ticao and Masbate in 600 fathoms. Among the objects obtained from this haul (station 5215) was the fresh shell of a Solemya, which, compared with the previously known species, may be regarded as enormous. Nothing remained of the soft parts whiclı had evidently been but recently lost.

## Solemya (Acharax) bartschii n. sp.

Shell subcylindrical, gaping at the ends and along the hase, corered with a strong polished black periostracum which extends over the margins, being continuous over the dorsal portion between the valves and produced beyond the edges of the shelly portion, basally about 40 , in front about 35 , and behind about 15 millimeters. In life this produced periostracum, undoubtedly covers and protects the portions of the surface of the animal not sheltered by the calcified valves; the margin at the anterior end is not split into strips corresponding to the radii of the shell as in the large American species of the groul, but preserves its continuity and is contracted marginally so that in life it must closely cover the whole anterior end of the animal, in a dome-like manner. Internally the ligament is wholly
opisthodetic but in front of the beaks the periostracum is produced inside the dorsal margin as well as externally. This interior extension covers a narrow strip of the thickened dorsal margin of each of the valves, leaving about two-thirds of these pseudo-nymphs bare and strongly radially grooved and striate, the radii diverging from the dorsal margin of the valves slightly in front of the beaks, and doubtless serving to make more efficient the local attachment of the periostracum, which is here thickened and expanded. The ligament is wide and strong, external, but visible in the gap between the valves behind the beaks and supported by heavily calcified nymphs. Behind the nymphs the dorsal margin of the shell on each side exhibits a long and conspicuous indentation. The valves are heavily calcified, internally radiately striate, the ventral margin straight, the dorsal margin nearly parallel to it except as modified by the nymphs, the two ralves touching only near the beaks, which are low but swollen, the rather narrow dorsal interval between the valves being covered by a continuons sheet of the thick periostracum. The posterior muscular impression is of moderate size and obliquely ovate, the anterior smaller, narrow and rhomboid in shape; the pallial line is obscure and continuous, situated close to the margin of the ralves; externally the surface is smooth except for lines of growth and a number of shallow, wide, radiating channels which proceed from the beaks toward the margin of the valres, where they produce a certain amount of undulation. Anteriorly there are eight, posteriorly six of these channels, with a median space which has no rays, and, on the basal margin of the valres, is about 50 mm . wide. The beaks are about 75.0 mm ., in front of the posterior end. The shelly part of the valves is 191 mm . long (the total length including periostracum is about 240 mm .), the height 62 mm . (with periostracum about 100 mm .) , and the estimated diameter of the ralves in life about 60 mm .

The perfect condition of this specimen enables us to understand the origin and use of the striated and thickened area of the anterior dorsal margin of the values, already noted by me in $S$. (A.) agassizii from the Gulf of Panama. To preserve it in its present satisfactory state it will be kept in alcohol.

With this remarkable specimen was obtained an interesting shell of Vesicomya, also without the soft parts, which may be described as follows :

## Vesicomya ticaomica n. sp.

Shell ovate, tumid, inequilateral, with the beaks within the anterior fourth of the length, low, prosocoelous, tumid, overhanging a large cordate lunule, of which the left valve carries a somewhat large portion; surface rude, sculptured irregularly and strongly by incremental lines; periostracum brownish, covering a livid whitish shell; ligament rather long, set in a deep, narrow groove; hinge as usual in the genus; interior chalky-white except the polished muscular impressions; pallial line broad, slightly irregular, with a feeble insinuation below the posterior adductor scars; shell thin, margins entire. Length 63, height 45, diameter 30, the beaks behind the anterior end 15 mm . The ligament is abont 22 , and the lunule 14 mm . in length. The shell is more tumid and more attenuated in front of the beaks than any other described species and exceeds most of them in size.

## THE MOLLOSCA OF MCLENNAN COUNTY, TEXAS.

## BY JOHN K. STRECKER, JR.

In 1883, Mr. Henry Hemphill sent a few species of shells from Waco, to Dr. W. G. Binney. These specimens are now in the Binney collection in the United States National Museum (see Manual of American Land Skells, Bull. U. S. Natl. Mus., No. 28, 1885, pp. 477, 485, etc.). I have been unable to find any examples of two of the species recorded, i. e., Praticolella griseola Pfr. and Vitrea sculptilis Bland. ${ }^{1}$

In Singley's list of Texas Mollusca (Report Geol. Survey of Texas, 1893, pp. 299-343) several species of McLemaan county shells are mentioned. I include Bulimulus $d$. schiedianus Pfr. in my list on this authority, although I have not collected it personally.

Examples of all of the other species mentioned in this paper have been collected by me during the past two years. Future investigations will doubtless bring others to light but as local lists of Texas

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[^0]:    ${ }^{1}$ The records of these two species from Waco are in all probability erroneous; the specimens identified as griseola must be a thin form of $P$. berlandieriana, and the supposed $V$. sculptilis is $V$. indentata umbilicata.-ED.

